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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/670,769	09/26/2003	Naoki Mori	62807-142	4331

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EXAMINER

NGUYEN, KIMNHUNG T

ART UNIT	PAPER NUMBER
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2629

DATE MAILED: 06/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/670,769

Applicant(s)

MORI ET AL.

Examiner

Kimnhung Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _____ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on _____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-7,9-11,13 and 18 is/are rejected.
- 7) ☒ Claim(s) 3,8,12 and 14-17 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>9/26/03</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This application has been examined. The claims 1-18 are pending. The examination results are as following.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claim 5 is rejected under 35 U.S.C. 102(b) as being anticipated by Son et al. (US 6,278,887).

As to claim 5, Son et al. discloses in fig. 1, a portable table terminal device (10), comprising communication CPU (processor 104) for executing communication processing;

an application CPU (memory 114) for executing application processing (see col. 3, lines 41-45);

display means (108) for displaying an image according to a signal outputted from the communication CPU;

a backlight for emitting light to the display means (see col. 2, lines 64-65, and col. 4, lines 12-14); and

power supply means (power source 118) for controlling supply of power to the application CPU (memory 114 includes ROM, RAM, see col. 3, lines 41-45) according to a state in which the backlight turns off (see col. 4, lines 33-40).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 6 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Son et al. (US 6,278,887) in view of TSUGAWA (US 2001/0022584).

As to claims 6 and 9, Son does not disclose that wherein the power supply means decreases the supply of power to the application CPU when the backlight turns off.

TSUGAWA discloses a portable information processing unit in fig. 1 that when the battery voltage drops below the reference voltage value, the power supply to the backlight emitter 26 is stopped (turns off) to minimize the power consumption (see 0076).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the battery voltage drops below the reference voltage value, the power supply to the backlight emitter is stopped (turns off) to minimize the power consumption as taught by TSUGAWA into the portable terminal device of Son et al. for producing the claimed invention because this would minimize the power consumption, and allow to the user the game to be played utilizing reflection light without aid of the backlight source (see TSUGAWA, see 0076).

5. Claims 1-2,7 and 10-11, 13 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Son et al. (US 6,278,887) in view of Nakatani et al. (US 2003/0020699).

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As to claim 1, Son et al. discloses a portable terminal device in fig. 1(100), comprising: a communication central processing unit (CPU, see processor 104) for executing communication processing; an application CPU (see memory 114) for executing application processing (see col. 3, lines 41-45); display means (108) for displaying an image according to a signal outputted from the communication (CPU 104); and a power supply means (118) to the application CPU. However, Son et al. does not disclose the power supply means for decreasing supply of according to a periodical update interval of an image displayed on the display means.

Nakatani et al. discloses in fig. 1, a display device having the lowering power consumption, if the image refresh interval is matched with the frame period of a moving image (see 0016, 0029 and 0046-0047).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the display system having the lowering power consumption, if the image refresh interval is matched with the frame period of a moving image as taught by Nakatani et al. into the portable terminal of Son et al. for producing the claimed invention because this would provide to the user an optimal value according to the type of image data, without depending on the image data, and thereby reducing power for driving the capacitive display element, as a result, it becomes possible to provide a display device capable of reducing power consumption of the type of image data (see 0029).

As to claim 2, Son et al. does not disclose that the periodical update interval includes an update interval in seconds and an update interval in minutes and the power supply means decreases the supply of power to the application CPU when the update interval in seconds is changed to the update in minutes.

Nakatani et al. discloses an update interval in seconds (see 0047) and an inherent update interval in minutes because it depends on the set up of the choosing of the user. Nakatani et al. also discloses the power supply means decreases the supply of power according to a periodical update interval of an image as discussed in claim 1 above (see Nakatani et al., see 0016, 0029 and 0046-0047), and therefore, Nakatani et al. also discloses an inherent interval in seconds is changed to the update interval in minutes because it depends on the set up of the choosing of the user. Claim 2 depends on claim 1 is rejected on the same reasons on claim 1.

As to claim 7, claim 7 depends on claim 1, similar to claim 2 and is rejected on the same reasons on claim 2.

As to claim 10, Son et al. discloses in fig. 1, an information communication terminal device, comprising:

communication means (antenna 120) for communicating information;

display means (108) for displaying an image thereon;

a plurality of CPU (memory comprising ROM RAM) for processing information (see col. 3, lines 41-49); and

CPU state control means (processor 104) for controlling a state of each of the CPU (ROM, RAM). However, Son et al. does not disclose a periodical update interval of an image displayed on the display means.

Nakatani et al. discloses in fig. 1, a display device having the image refresh interval is matched with the frame period of a moving image (see 0016, 0029 and 0046-0047).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the display system having the image refresh interval is matched with the

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frame period of a moving image as taught by Nakatani et al. into the portable terminal of Son et al. for producing the claimed invention because this would provide to the user an optimal value according to the type of image data, without depending on the image data, and thereby reducing power for driving the capacitive display element, as a result, it becomes possible to provide a display device capable of reducing power consumption of the type of image data (see 0029).

As to claim 11, Son discloses in fig. 1, an information communication terminal device according to claim 10, comprising the CPU state control means (104) controls, a state of one of the CPU (memory 114) which executes processing of information (see col. 3, lines 41-45) regarding the image displayed on the display means (108).

However, Son et al. does not disclose that the periodical update interval includes an update interval in seconds and an update interval in minutes and the update interval in seconds are changed to the update in minutes.

Nakatani et al. discloses an update interval in seconds (see 0047) and an inherent update interval in minutes because it depends on the set up of the choosing time by minutes or seconds of the user, therefore, it should have an inherent an update in seconds is changed to update interval in minutes.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the update interval in minutes, an update in seconds is changed to update interval in minutes as taught by Nakatani et al. into the portable terminal device of Son et al. for producing the claimed invention because this would provide the image data signal S1 of a moving image of 15 to 20 frames per second is generated one frame at the time intervals of 1/20 second to 1/15 second, and the image data signal S1 of moving image is sent out from the CPU

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to the memory at constant intervals corresponding to the frame frequency of the image data signal S1 (see Nakatani, see 0047). Therefore, which become possible to provide a display device capable of reducing power consumption of the type of image data. Claim 11 depends on claim 11 is rejected on the same reasons on claim 10.

As to claim 13, Son et al. discloses further comprising a backlight for emitting light to the display means (108) (see col. 7, lines 20-28), the CPU state control means (104) controlling, when the backlight turns off, a state of the CPU (memory 114) executing processing of information regarding the image displayed on the display means (because processor 104 controls the operation and the features of the handset, processor 104 has associated therewith computer program code running on the processor to carry out the functionality of the device, therefore when the backlight turns off, a state of the CPU executing processing of information regarding the image displayed on the display (108) still to work, see col. 3, lines 39-45, and col. 7, lines 20-25). Claim 13 is depends on claim 11 is rejected on the same reasons on claim 11.

As to claim 18, claim 18 is similar claim 13 and discussed above. Claim 18 depends on claim 10, is rejected on the same reasons on claim 10.

6. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Son et al. (US 6,278,887) and Nakatani et al. (US 2003/0020699) as applied to claims 1-2 and in view of TSUGAWA (US 2001/0022584).

As to claim 4, Son et al. discloses further that, wherein the power supply means (118) includes a backlight for emitting light to the display play means (108) (see col. 7, lines 25-30).

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Nakatani et al. discloses the power supply means decreases the supply of power according to a periodical update interval of an image as discussed above.

However, Son et al. and NaKatani et al. do not disclose the power supply means decreasing the supply of power when the backlight turn off.

TSUGAWA discloses a portable information processing unit in fig.1, that when the battery voltage drops below the reference voltage value, the power supply to the backlight emitter 26 is stopped (turns off) to minimize the power consumption (see 0076).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the battery voltage drops below the reference voltage value, the power supply to the backlight emitter is stopped (turns off) to minimize the power consumption as taught by TSUGAWA into the portable terminal device of Son et al. and Nakatani et al. for producing the claimed invention because this would minimize the power consumption, and allow to the user the game to be played utilizing reflection light without aid of the backlight source (see TSUGAWA, see 0076). Claim 4 depends on claim 2 and is rejected on the same reasons on claim 2.

Allowable Subject Matter

7. Claims 3, 8, 12 and 14-17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. The following is a statement of reasons for the indication of allowable subject matter: The present invention is directed to a portable terminal device, comprising a communication central processing unit (CPU) for executing communication processing; an application CPU for

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executing application processing; a display means for displaying an image according to a signal outputted from the communication CPU and/or application CPU; and power supply means for decreasing supply of power to the application CPU. The combinations of the closest prior art of Son et al. (US 6,278,887), Nakatani et al. (US 2003/0020699) and TSUGAW (US 2001/0022584) show a similar invention, however, they fail to teach that the power supply means decreases the supply of power to the application CPU when the update interval in minutes is set to a state in which a periodical update interval is stopped as claims 3, 8, 12; or wherein the CPU state control means delays timing of changing the state of CPU as claims 14-17.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kimnhung Nguyen whose telephone number is (571) 272-7698. The examiner can normally be reached on MON-FRI, FROM 8:30 AM-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Hjerpe can be reached on (571) 272-7691. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Kimnhung Nguyen

Patent Examiner

May 17, 2006